

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023988**Date Inspected:** 10-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

**WELDING**

This QA Inspector observed the following work in progress:

**Outside Yard – OBG Trial Assembly**

This QA Inspector observed ZPMC qualified welding personnel identified as 066421 perform welding by Flux Cored Arc Welding (FCAW), on Edge plate and Deck plate I Rib welds between panel points PP125 and 125.5 of OBG Segment 14W. Weld joint is identified as SEG3020AE-003, 006. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 066751 perform welding by Flux Cored Arc Welding (FCAW), on Edge plate and Deck plate I Rib welds between panel points PP125.5 and 126 of OBG Segment 14W. Weld joint is identified as SEG3020AE-085, 088. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 045213 perform welding by Shielded

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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Metal Arc Welding (SMAW), on longitudinal diaphragm I Rib Stiffener weld of OBG Segment 14W. Weld joint is identified as LD3048-001-116. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 066825 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam to longitudinal diaphragm weld at panel point 125.5 of OBG Segment 14W. Weld joint is identified as SEG3020S-052/053. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2113-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 037932 perform welding by Shielded Metal Arc Welding (SMAW), on Side plate I Rib Stiffener weld of OBG Segment 14W. Weld joint is identified as SEG3020AW-021, 015. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 037748 perform welding by Shielded Metal Arc Welding (SMAW), on Edge plate to Side plate weld of OBG Segment 14W. Weld joint is identified as SEG3020AY-002. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 066261 perform welding by Shielded Metal Arc Welding (SMAW), on Anchor plate T Rib to Floor beam weld of OBG Segment 14W. Weld joint is identified as SEG3020R-172. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067572 perform repair welding by Shielded Metal Arc Welding (SMAW), on Edge beam to Floor beam weld at panel point 126.5 of OBG Segment 14W. Weld joint is identified as SEG3020P-208. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1, which is used as per welding repair report B-WR20970. See attached picture.

This QA Inspector observed ABF qualified NDT personnel perform Ultrasonic Testing on Side plate to Side plate weld of OBG Segment 14W. Weld joint is identified as SEG3020AW-089, 092. A Total of 15 Class A indications and 2 Class A indications were found on the weld numbers SEG3020AW-089 and SEG3020AW-092 respectively. See attached picture.

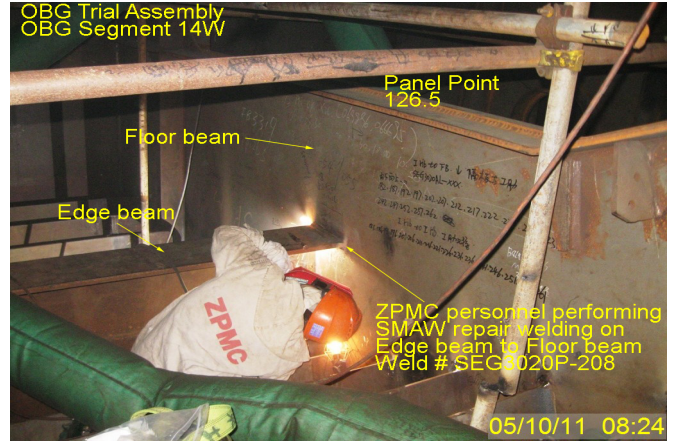
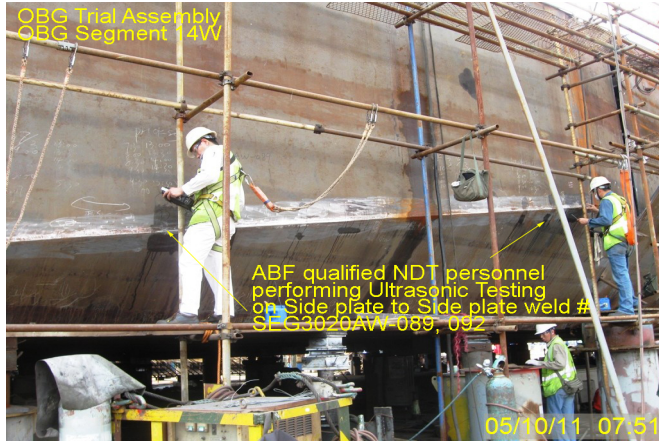
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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## Summary of Conversations:

No significant conversations were reported on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372 , who represents the Office of Structural Materials for your project.

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**Inspected By:** Upadhye, Anand

Quality Assurance Inspector

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**Reviewed By:** Clifford, William

QA Reviewer